

The Use of Short-Term Group Music Therapy for
Female College Students with Depression and Anxiety

by

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ABSTRACT

There is a lack of music therapy services for college students who have problems with depression and/or anxiety. Even among universities and colleges that offer music therapy degrees, there are no known programs offering music therapy to the institution's students. Female college students are particularly vulnerable to depression and anxiety symptoms compared to their male counterparts. Many students who experience mental health problems do not receive treatment, because of lack of knowledge, lack of services, or refusal of treatment. Music therapy is proposed as a reliable and valid complement or even an alternative to traditional counseling and pharmacotherapy because of the appeal of music to young women and the potential for a music therapy group to help isolated students form supportive networks. The present study recruited 14 female university students to participate in a randomized controlled trial of short-term group music therapy to address symptoms of depression and anxiety. The students were randomly divided into either the treatment group or the control group. Over 4 weeks, each group completed surveys related to depression and anxiety. Results indicate that the treatment group's depression and anxiety scores gradually decreased over the span of the treatment protocol. The control group showed either maintenance or slight worsening of depression and anxiety scores. Although none of the results were statistically significant, the general trend indicates that group music therapy was beneficial for the students. A qualitative analysis was also conducted for the treatment group. Common themes were financial concerns, relationship problems, loneliness, and time management/academic stress. All participants indicated that they benefited from the sessions. The group progressed in its

cohesion and the participants bonded to the extent that they formed a supportive network which lasted beyond the end of the protocol. The results of this study are by no means conclusive, but do indicate that colleges with music therapy degree programs should consider adding music therapy services for their general student bodies.

DEDICATION

This work is dedicated to Robert and Sandra Ashton, father and mother, educators and music lovers both; to Zeke and Gennifer Ashton and Elizabeth Brazell, brother, sister in law, and sister who have given enormous amounts of support over the years; to Nicole Smith, the most loyal friend one could ever hope to find; and to Randy Biles, comic genius and all-around good guy. Most of all, this thesis is dedicated to the young women who took part in the study, with gratitude and admiration.

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Chapter 1

INTRODUCTION

Female college students present a unique population with which to study group music therapy. Females are at greater risk than males for developing internalizing disorders such as anxiety and depression (Liang et. al, 2002). A young woman's chances of developing a mood or anxiety disorder are further increased during the developmental stage known as emerging adulthood (Milne & Lancaster, 2001). Add to these risk factors the stressful impact of transitioning to college life at a large university, which is extremely challenging for many young women (Wiseman, 1997), and it becomes clear that there is a strong likelihood that a large percentage of female college students will deal with depression and/or anxiety problems during their undergraduate career (Kashani et al., 1987; Petersen, Sarigiani, & Kennedy, 1991; Weissman, 1987). The logical conclusion from this evidence is that female college students represent a population with strong psychological and emotional risks that need to be addressed.

There is a dearth of studies in the music therapy literature dealing with female college students. Most music therapy studies that look at behavioral health disorders such as depression and anxiety are focused on acute psychiatric facilities, which combine adults of both sexes and in all stages of life (Silverman, 2009; 2010; 2011). Though there is relevant data to be found in these studies, such as the types of interventions used and the efficacy of these interventions, it is difficult to extrapolate this data to a specific group such as female college students because of the unique pressures they face compared to the broader population seen in behavioral health facilities. Likewise, many studies exist

which explore music therapy with adolescent groups, such as those who are broadly termed “at-risk” (Snow & D’Amico, 2010), those who have psychiatric disorders (Silverman, 2009; 2010; 2011), criminal histories (Kobin & Tyson, 2006), or developmental delays such as autism (Gooding, 2011). Again, though there is certainly relevant information from these studies of adolescents and music therapy, there are enough differences in the needs of the populations to make a generalization to female college students inappropriate and inadequate.

Although there are currently seventy-two college and university programs offering music therapy as a degree (AMTA, 2011), most if not all of these schools do not offer music therapy services to their own students. One study (Gardstrom & Jackson, 2011) surveyed 41 undergraduate music therapy programs to see how many require personal music therapy for their own undergraduates. In this study, three music therapy program directors indicated that their programs both required and provided personal music therapy services for their music therapy students. However, it is not clear in this study whether these services were offered to the general student body. No studies could be found surveying whether music therapy degree programs offer music therapy to their general student body. The logical conclusion from the available data is that music therapy is rarely offered to general student populations at colleges and universities. This is very different from the fields of counseling and clinical psychology, which typically offer low-cost services to the college’s students, employees, and community members (Gardstrom & Jackson, 2011). In these counseling and clinical psychology programs, the therapy services are typically provided by graduate students as part of their clinical

training hours, and are supervised by faculty members. Studies show that students who have depression or anxiety and who seek help at the university counseling center show excellent rates of improvement (Church, et al., 2012; Lee, et al., 2009). Those students who do not receive treatment of some kind, estimated to be approximately 90% of undergraduates who have a depression or anxiety disorder, often show worsening symptoms, including dropping out of school, becoming involved in drug abuse or dependence, and in far too many cases, committing suicide (Lee et al., 2009). Those students who are experiencing depression or anxiety but who are not getting treatment might be more motivated by music therapy.

Music therapy seems to be an especially effective modality for female college students. Music is a strong part of youth culture, and many college students already use music as a form of self-medication to deal with stress and depression (Forney, 2005; Thoma, et al., 2012). Female college students are also greatly in need of developing supportive social networks, particularly those who are attending college away from their family home (Duggan & Pickering, 2007-2008; Ishitani, 2008). A music therapy group can provide some of this social support which is so crucial to students' success in a large university.

Feeling socially isolated is a huge stressor and has been identified as a major contributing factor to depression (Hagerty, Williams, Coyne, & Early, 1996; Jordan et al., 1991; Wiseman, 1997). According to these studies, the major transition from high school or community college into a university setting and women's greater tendency to internalize stress make female college students extremely vulnerable to isolation. Group

music therapy can help develop social support by facilitating group bonding among the participants (Gold, Solli, Kruger, & Lie, 2009; Grocke, Bloch & Castle, 2009). These studies found that group music therapy can improve social and communication skills via the group process, where roles and patterns of social behavior are explored musically, and the participants must learn to compromise, assert themselves, and set and maintain boundaries. These processes all facilitate group bonding.

Group music therapy helps to address depression and anxiety by improving self-esteem and self-efficacy, which are closely related concepts related to overall psychological health (Corrigan, Watson & Barr, 2006; Rice & Cummins, 1996). The interventions used in music therapy groups, such as lyric discussion, song writing, and musical improvisation, help participants to feel that they can do things that they did not think they were capable of. Self-esteem and self-efficacy help individuals to exercise their free will, making more empowered choices based on a sense of autonomy over one's life rather than passively allowing things to happen and feeling out of control (Ryan, 2008). When self-esteem and self-efficacy are increased, depression and anxiety tend to decrease (Corrigan, Watson & Barr, 2006; Ryan, 2008). Music therapy also utilizes many relaxation techniques which can decrease anxiety and improve positive affect (Silverman, 2009; 2010; 2011). Participants can learn to use these skills on their own to effectively regulate their affect.

Finally, music therapy groups stress the importance of expressing one's feelings and emotions through a variety of music-based interventions. By being aware of and

expressing negative or uncomfortable affect, participants can decrease their internalizing tendencies (Gold et al., 2009), thereby reducing their depression or anxiety symptoms.

The present study attempts to begin filling a gap in the music therapy literature by providing short-term group music therapy to female college students who are experiencing symptoms of depression and anxiety. One goal of the study is to persuade university and college music therapy programs that they should consider adding music therapy services for their general student body. This study attempts to show that this is a valid, reliable and cost-effective way to address the needs of female college students who have depression or anxiety, while also addressing the academic needs of music therapy students by helping them to get more clinical experience. A second goal is to help the students in the music therapy group to bond and form a supportive network for each other, while also reducing their symptoms. A third goal of the study is to examine the stressful themes in the lives of the participants to help learn how to decrease these risk factors in the future. Finally, this study aims to provide some quantitative data, through comparison with a control group, which supports the validity of music therapy to treat depression and anxiety, either on its own or as a complementary treatment.

Chapter 2

LITERATURE REVIEW

College is a time of huge transition and increasing responsibility. The college environment consists of much higher levels of adult responsibility than high school, and many students do not have the coping strategies or social skills to manage the transition from adolescence to adulthood (Liang, et al., 2002). There is increasing evidence that female adolescents and adults are more likely than their male cohorts to become depressed, either clinically or subclinically (Baron & Camphell, 1993; Kashani et al., 1987; Li, DiGuiseppe, & Froh, 2006; Petersen, Sarigiani, & Kennedy, 1991; Weissman, 1987). Female adolescents and adults are twice as likely as their male counterparts to develop depression (Hankin et al., 1998; Liang et al., 2002). Likewise, adolescents up to age 20 are more likely to have depression than adults (Milne & Lancaster, 2001). Two studies determined that fully 20% of adolescents meet the diagnostic criteria for major depression (Lewinsohn et al., 1993; NIH, 2008). Young women's risk of developing depression and anxiety increases during the college years (Baron & Camphell, 1993; Kashani et al., 1987; Petersen, Sarigiani, & Kennedy, 1991; Weissman, 1987). This body of evidence suggests that young college women are extremely vulnerable to depression and anxiety disorders. Several risk factors have been identified to help explain this vulnerability, including tenuous social support/social isolation, low self-esteem, emotion-focused coping style, and insecure parental attachment.

Tenuous social support

Young women's self-concepts tend to be highly defined by interpersonal relationships (Hagerty, Williams, Coyne, & Early, 1996; Jordan et al., 1991; Wiseman, 1997). First year female students report greater feelings of loneliness and social isolation than do their male counterparts or same-sex upper-division students (Hagerty, Williams, Coyne, & Early, 1996). Feeling isolated and lonely can lead to reduced self-esteem.

Poor self-esteem

Self-esteem plays a central role in adolescents' psychological development and outcomes, including academic achievement (Liu, Kaplan, & Risser, 1992), depression (Smart & Walsh, 1993) and illicit drug use (Taylor & del Pilar, 1992). Research has documented decreases in adolescent self-esteem as a consequence of stress (Corrigan, Watson, and Barr, 2009). Self-esteem is a person's global assessment of their self-worth across multiple domains, such as mental, physical, emotional, and intellectual (Ryan, 2009). It is postulated that stress develops due to a lack of self-efficacy, which is the individual's assessment of their abilities based on previous experience (Corrigan, Watson, and Barr, 2009; Ryan, 2009). If one has performed poorly in the past on tests, for example, their current view of their own self-efficacy in the domain of test-taking may be poor. This reduced belief in one's self-efficacy lowers self-esteem and creates anxiety in situations where self-efficacy is required, such as future tests.

Emotion-focused coping style

One study of coping styles among depressed adolescents indicated that adolescent girls used more emotion-focused and ruminative coping than did boys (Li, DiGuiseppe,

& Froh, 2006). Further, the association between stress and depression has been found to be more prominent in adolescent girls than in adolescent boys (Ge et al., 1994; Rubin et al., 1992). Women are more likely to use emotion-focused coping strategies, which are thoughts or actions initiated to deal with one's emotions associated with the stressor (Brems & Johnson, 1989; Stone & Neale, 1984). Emotion-focused coping is associated with higher degrees of depressive symptoms (Compas, Malcane, & Fondacaro, 1988; Ebata & Moos, 1991). Rumination, or repeatedly thinking or talking about stressful events, and distraction, such as eating or watching a movie, are two types of emotion-focused coping. Nolen-Hoeksema (1994) proposed that women are more likely to engage in ruminative coping strategies than are men, and Li, Di Guiseppe, and Froh (2006) empirically demonstrated this hypothesis.

Separation-individuation and attachment problems

Attachment with the parent typically takes place during infant development and allows for secure and healthy relationships in the future by having the primary relationships be well-bonded and secure. This securely formed attachment to the parents or parent allows the adolescent to successfully navigate the process of separation-individuation. Separation-individuation is a process during which the individual disengages from the parent or parents to whom they are attached (Engler & Wiemann, 2010). Psychological separation occurs to allow for the individuation of the adolescent and is facilitated by ongoing support from caregivers (Blos, 1979). Successful adolescent separation-individuation establishes a comfortable balance between one's needs for separateness and connectedness (Allison & Sabatelli, 1988) and has been associated with

psychological adjustment (Holmbeck & Leake, 1999). If an adolescent does not have secure attachment to at least one parental figure, they are less likely to successfully navigate this important process of separation-individuation (Armsden et al., 1990).

Armsden et al. (1990) found depressed adolescents reported significantly less secure parental attachment; De Jong (1992) found that adolescents with a history of suicidality had the least secure parental attachment. This leads to the conclusion that adolescents who have insecure parental attachments are more likely to encounter major problems in the process of separation-individuation, and thus be at greater risk for depression, anxiety and suicide. Poor separation-individuation and insecure attachment have been found to result in lower levels of self-esteem and self-efficacy (Corrigan, Watson, & Barr 2009; Rice & Cummins, 1996; Ryan 2009).

First-year or transfer college students

Kashani and Priesmeyer (1983) determined that freshmen suffer from more adjustment difficulties, such as appetite disturbances, feelings of worthlessness, concentration problems, depression, and suicidal thoughts, compared to other upperclassmen. In addition, freshmen are more likely to experience loneliness (Beck, Taylor, & Robbins, 2003), low self-esteem, and higher frequencies of life changes than seniors (Marron & Kayson, 1984). Previous empirical studies also have shown that the stress of relocation, separation from family and friends, meeting new people, new academic challenges, and the discrepancy between expectations and reality often result in personal, social, and academic adjustment difficulties for freshmen (Dyson & Renk, 2006; Kenny & Donaldson, 1991; Kerr, Johnson, Gans, & Krumrine, 2004; Mallinckrodt,

1992). The adjustment problems commonly found in college freshmen and transfer students also often result in poor academic performance and school dropout (Duggan & Pickering, 2008; Ishitani, 2008).

Importance of receiving treatment

Only about 10% of first-year college women who experience moderate to severe depression seek out treatment (Lee, et al., 2009). Of the approximately 90% who do not seek treatment, many fall through the cracks by dropping out of school or attempting, and sometimes completing, suicide. They also may self-medicate through the use of drugs and alcohol, or by engaging in risky sexual behavior. Those young women who do receive treatment tend to get either psychopharmacological treatment, in the form of antidepressants and perhaps anti-anxiety medication; or they receive “talk therapy” in the form of counseling or psychotherapy. Sometimes they receive both treatments.

There is a strong correlation between receiving treatment for depression and college retention. A study by Lee et al. (2009) of over 10,000 college freshman and transfer students found that those students who received individual or group counseling services or psychiatric services from the university’s counseling center during their first year of enrollment (approximately 10% of the total freshman and transfer student population) were three times more likely to enroll for classes the second year. Evidence exists about effective treatments to decrease depression symptoms. Church et al. (2012) randomly assigned 30 moderate-to-severely depressed college students to an Emotion Focused Therapy (EFT) group or a control group. The EFT group, after four ninety-

minute sessions, had significantly lower depression scores at posttest than the control group.

Evidence for music therapy as treatment

There is evidence that music therapy is very effective for treating depression and anxiety. Pelletier (2004) conducted a meta-analysis of twenty-two quantitative studies of music therapy techniques to address stress-related arousal. Results showed that both music listening and music-assisted relaxation in multiple studies significantly decreased arousal ($d = +.67$).

In one study of psychiatric facilities, group music therapy was a common modality. Music therapists in psychiatric settings used primarily behavioral or psychodynamic approaches but considered the primary psychological philosophy as eclectic. Music therapy techniques employed by the therapists included music-assisted relaxation, improvisation, songwriting, lyric analysis, and music and movement to address clients' objectives (Silverman, 2006; 2008; 2009; 2010; 2011).

Music therapy has been found to be rated as significantly more pleasurable and helpful than art and recreation therapy (Heaney, 1992; Silverman, 2006), group psychotherapy, individual psychotherapy, and medication (Heaney, 1992). However, these studies were completed with psychiatric patients rating the treatment modalities they received (Silverman, 2008). Silverman (2011) found experimentally that group music therapy was just as effective as group talk-therapy at teaching coping skills to and establishing working alliance with patients in an acute adult psychiatric unit.

A study of anxiety (Teague, 2006) sought to investigate the effects of group music therapy combined with other creative art methods on self-reported levels of anxiety, depression, and self-esteem among women who had experienced intimate partner violence. The group met for six sessions, each lasting from sixty to ninety minutes in duration, over a period of three months. Visual analog scales were used to assess anxiety, depression, and self-esteem. The goals of the group were to increase self-esteem and self-expression, decrease anxiety and depression, and increase social support. Significant decreases in depression and marginally significant decreases in anxiety were observed among the study's seven participants. Most participants reported that all of the interventions were helpful and rated the group therapy as a positive experience. These findings suggest that active music therapy in a group context can be very effective at improving depressive and anxious symptoms (Teague, et al, 2006).

In spite of the research indicating music therapy use for depression and anxiety symptoms, and its appeal to and efficacy for adolescents and young adults, there is a dearth of literature on music therapy for female college students with depression. It is likely that due to the small number of practicing music therapists compared with verbal therapists, there simply are not music therapists who are both doing this work and also researching or writing about it. The current study aims to address this deficit.

Rationale of Present Study

There are several reasons for this study. The first is to address the gap in mental health treatment that is available to university students who have depression and/or anxiety problems. In spite of growing inclusion of music therapists in psychiatric

hospitals and other behavioral health facilities, music therapy is available to very few college-age women who have problems with depression and/or anxiety. Even among schools that have music therapy departments, almost none offer music therapy services of any kind to their students, either within or outside of the department. This study is designed to offer music therapy to this population. The second reason is to discover whether a short-term music therapy group can in fact provide effective treatment for female students who have depression and/or anxiety, and whether any gains last beyond the timespan of the therapy group. Any therapy that provides long-term results, such as symptom reduction, improved coping skills, increased social support, continuation of some type of treatment, and college retention through graduation is much more likely to be adopted and advertised by student health and counseling services than therapy that does not produce lasting results. The third reason for this research is to address the specific needs of female students in a large university through the use of group music therapy. Due to their youth, transitional environment, and gender, female students face unique stressors and risk-factors not seen in other populations. Thus, any therapy must cater to these unique issues. Finally, it is hoped that this research will inspire university music therapy programs, perhaps in collaboration with health and counseling services, to begin offering music therapy to students in need. This study aims to demonstrate one cost-effective way in which this could be done.

The purpose of this study is to examine the efficacy of short-term group music therapy for college women who have depression and anxiety. It is important to demonstrate quantitatively and qualitatively that music therapy is a legitimate and

effective therapy for this population, either in conjunction with, or as an alternative to, standard mental health treatments, so that it can be made available to young women.

Research Questions

1. Does short-term group music therapy reduce depression scores on the Beck Depression Inventory?
2. Does short-term group music therapy reduce anxiety scores on the State Trait Inventory for Cognitive and Somatic Anxiety?
3. Does short-term group music therapy improve general affect scores on the Positive and Negative Affect Schedule?
4. Does short-term group music therapy improve scores on Ryff's Scales of Psychological Well-Being?
5. If the answer to any of the above is "yes," do the results maintain for five weeks post treatment?
6. Do the results differ between the control and experimental groups?
7. How many of the participants plan to continue their enrollment at the university into the fall semester?
8. What common themes emerge in music therapy with this population?
9. Which music therapy interventions seem to have the most effect?
10. Can a group of diverse female students from different academic programs who come together in a music therapy group form a supportive network?

Chapter 3

METHODS

Design

All methods were approved by the university's Institutional Review Board. A mixed-methods design was chosen in order to adequately answer all of the posed research questions. The qualitative portion utilized a group case study format in order to explore the techniques used, the participants' own reported experiences, the group dynamics, and the stressful themes that were impacting the present sample of female students. To establish trustworthiness according to guidelines for naturalistic inquiry (Lincoln & Guba, 1985), the therapist utilized prolonged engagement, detailed field notes for each session, and audit checks from objective readers.

For the quantitative portion, a quasi-experimental design was utilized, wherein students were recruited from the general university population, screened for eligibility, and offered to be placed into either a control group or an experimental group. The quantitative portion was deemed crucial to add scientific validity to the study, in the hopes that universities with music therapy degree programs might be persuaded by the data to consider adding music therapy services to their general student bodies. Quantitative data also helped to provide a numerical foundation for phenomena that were observed qualitatively.

Subjects

Subjects were recruited through several methods. The first method was via flyers posted in the student counseling center. The flyers advertised the study and provided the

researcher's name, phone number, and the study email address for interested students to contact the researcher. This placement was ineffective and did not produce any prospective subjects. The second method consisted of posting the flyers in common areas around the university campus, including the libraries, student union, academic buildings, outdoor bulletin boards, and dormitories. Several residence hall advisors and professors were also asked to share the flyers with their students and residents. To provide a small incentive, \$10 iTunes cards and CDs of music used in the therapy group were offered to each participant. The posted flyers yielded 14 prospective subjects. A short, live presentation by the researcher at two introductory psychology lectures made up the third method, which yielded 11 prospective subjects. In total, 25 prospective subjects contacted the researcher via text or email and were screened for inclusion. Inclusion criteria limited potential subjects to female students currently enrolled at least part-time. Once interest in the study was established and email addresses provided, each of the 25 prospective subjects was emailed the consent form and a time grid. The consent form provided information about the research study and the details of participation to help potential subjects choose whether or not to participate. The time grid included instructions on how to fill out availability for group participation. After each potential subject's availability was received, the time was chosen based on when the most people were available. An email was then sent to all potential subjects listing the following options:

1. Participate in the music therapy experimental group on four consecutive Thursday evenings from 6-7:30, plus a follow-up survey.

2. Participate in the control group by completing weekly emailed surveys at home for four consecutive weeks plus a follow-up survey.
3. No further participation.

Seven women were able to meet at the chosen time and elected to continue in the experimental group. Eight potential subjects were not able to meet at the chosen time and opted to be in the control group. The ten remaining potential subjects either did not respond to the emails, or responded that they did not wish to participate any further.

Group Music Therapy for Depression/Anxiety Symptoms

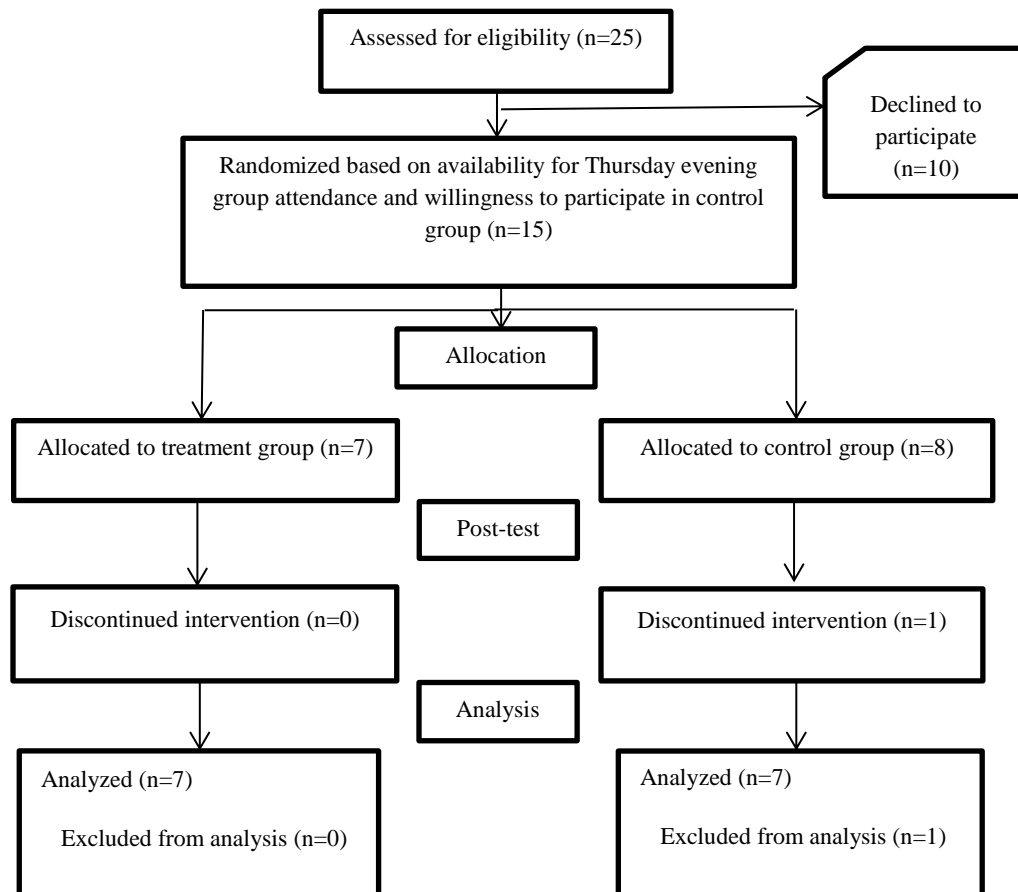


Figure 1. Desert Groove flow diagram

Setting

The experimental group met at a university building approximately 1 mile off-campus. This building housed the music therapy clinic jointly run by the university music therapy department and a non-profit music therapy agency. The chosen room in the clinic basement had an electric piano in the room, folding tables and chairs, and a speaker system for connecting a computer or iPod. Besides these items and some decorations on the walls, the room was open and spacious. There was easy access to various percussion instruments on the shelves outside the therapy room, as well as upstairs in the main clinic's storeroom.

The control group completed weekly surveys via email, and on one occasion, over the phone. There was no control in terms of the environment in which the control group actually completed the surveys, but it is presumed based on interactions with the control group that most subjects filled out their surveys in their homes or dorm rooms on their personal computers.

Equipment

In addition to the items already in the therapy room, equipment included a guitar, iPod, portable speaker, lyric sheets for selected songs, pens and pencils, a variety of multicultural percussion instruments, and various art materials. The songs used were *Shake It Out* by Florence + the Machine, *Good Riddance* by Greenday, and *Ready for Love* by India.Arie. These songs were all played live; a recording of *Shake It Out* was also used. Recorded music for meditation and art-to-music interventions included *Music for Zen Meditation* by Riley Lee; *Bellydance – The Art of the Drum Solo* by Issam

Houshan; and *Liquid Mind IV: Unity* by Chuck Wild. A worksheet called “Personal Recovery CD” was used for art-to-music; and another worksheet entitled “I Am Poem” was used for a creative writing intervention. Finally, an article on time management tips for college students was obtained from the U.S. News website (Jacobs & Hyman, 2009).

Procedure

The initial step in the procedure was setting up a dedicated email account for the study. This was done through gmail, and was the primary method of communication for both groups. Email addresses for the subjects were divided into Control Group and Music Therapy Group. All group emails were sent BCC (blind carbon copy) so that no subject could see the email address for any other subject. This ensured that subject confidentiality was protected.

Measurement tools were chosen based on the relevance of what the tools measure, the goals for the group, and on the brief time each survey takes to complete. The survey instruments included the Beck Depression Inventory (BDI); the Positive and Negative Affect Schedule (PANAS); the State Trait Inventory of Cognitive and Somatic Anxiety (STICSA) - state version and trait version; and Ryff’s Scales of Psychological Well-Being (PWB). These instruments are discussed in more detail in the quantitative results section. All five surveys taken together could be completed in 15-20 minutes.

Each session required anywhere from 30 minutes to just over an hour to plan. This preparation included selecting songs for lyric analysis, printing lyric sheets, practicing each live song several times, collecting art materials and instruments, and setting up the furniture and equipment.

Control group procedure

Each control subject made arrangements to meet with a researcher in person to sign the consent form and receive their \$10 iTunes card. This took place in the first week of the study protocol. The surveys were then emailed to the control group each week for four weeks and again at five weeks post-study. Subjects were asked to fill out the surveys electronically and email them back. One subject asked to complete the surveys via phone interview the first week, but chose to complete them electronically thereafter. All five surveys were distributed the first week and at follow-up. The second and third weeks, only the BDI and the PANAS were used. Due to a miscommunication with the research assistant, the two versions of the STICSA and the Ryff's Scales were not distributed with the other fourth week surveys. The control group also completed a four-question demographic survey at follow-up, at which time they received their copy of the group CD.

Treatment group procedure

The treatment group, which was dubbed "Desert Groove Music Group," took place in the basement of the university music therapy clinic. Transportation was provided by the researcher for four of the participants; the other three participants drove themselves, walked, or were given rides by someone else. Each group began with the surveys. 15-20 minutes of silence was provided for participants to complete the surveys without distraction. The experimental group completed all five surveys only on the first and fourth weeks and again at follow-up, and completed just the BDI and PANAS on the second and third weeks. This group also completed a demographic survey at follow-up.

During the first session, the experimental participants signed the consent forms and received their \$10 iTunes cards. Participants were instructed to create a study ID number to list on each survey. After the surveys were completed each week, each participant placed their surveys in a manila envelope and sealed it before passing it back to the therapist. Once the surveys were completed, the protocol of each session varied (See Figure 1 under Methodology). Session 1 began with rhythmic naming and improvisation on a variety of multicultural drums, then closed with embodied problem solving, which incorporated movement and dance with piano accompaniment. Session 2 began with a review of rhythmic naming and an improvisation-based check-in using the drums. This was followed by four different types of meditation and then concluded with a lyric analysis of “Shake it Out” by Florence + the Machine. Session 3 began with a verbal check-in and discussion of time management techniques, followed by a lyric analysis of “Good Riddance” by Greenday. An art-to-music process using an art sheet entitled “Personal Recovery CD” was the closing intervention for this session. Session 4 began with another verbal check-in, followed by completion of the previous week’s art-to-music project. The second intervention was a creative writing technique using a worksheet entitled “I Am Poem”. The final intervention for this session was a lyric analysis of “Ready for Love” by India.Arie.

Methodology notes

Several methodological challenges were faced during this study. The first issue was absences in the experimental group. Because three different subjects each missed one session, the therapist emailed each one immediately after the missed session to check

on them. Each time, the subject emailed back saying that she was fine and had encountered family stress, illness, or a schedule conflict. To ensure that data collection was as complete as possible, the therapist emailed the missed surveys to the subject and asked her either to complete the surveys electronically and email them back or to bring a hard copy of the completed surveys to the next session. All three subjects complied with this request.

The second issue that came up is that, due to the therapist providing transportation to four of the participants, which increased total contact time by about 20 minutes each week, this group developed a closer therapeutic rapport with each other and the therapist than the three who did not need transportation. However, in further communications with each participant and through observation of the women during sessions, this difference in relationship appeared to be slight and did not prevent the non-carpool subjects from participating fully in the sessions.

A methodological issue with the control group presented itself with the collection of the surveys. Because the surveys were distributed and returned electronically, the researchers had no control over when the surveys were actually completed or collected. Several control subjects were very prompt in returning the surveys within 2 days; others took several days, or for one subject, a couple of weeks. This made the organizing of emailed data rather confusing, because the date of each survey had to be looked at closely to determine the proper order of completion. This also meant that occasionally, one subject completed one week's surveys on or about the same day as the next week's surveys, somewhat reducing the reliability of the data.

A final issue was that one participant was still 17 years old. As age was not listed in the inclusion criteria, this did not present any ethical or legal problems, but rather a slight logistical one in that the subject could not complete the consent form that first session. Her parent's signature was obtained and the consent form was submitted the second week. No problems were encountered related to the subject's age.

Chapter 4

DATA ANALYSIS

Qualitative analysis

Each session of the music therapy treatment group, referred to as Desert Groove Music Group for confidentiality purposes, contained two or three interventions. These are pictured in Figure 2. The rhythm-based interventions, including rhythmic naming, rhythm check-in, and clinical improvisation, were chosen to address pre-verbal or sub-verbal feelings and emotions. This allowed the subjects a safe way to engage in the group, as offering purely verbal information about one's mental health can be intimidating. Rhythm interventions also allowed for the expression of feelings which were not conscious for the participants, meaning that they could express things of which they had no prior realization or understanding. Rhythm was also a fun way to let the young women meet each other and the therapist. Finally, rhythm-based techniques provided flexibility in terms of structure, theme, level of engagement and ability.

Movement and meditation interventions were utilized to promote greater awareness of the somato-emotional, or "bodymind," connection. Because different emotions are often felt in specific areas of the body in fairly reliable patterns (Porges, 2007; Ekman, 1992), movement and meditation allowed for a greater awareness of the physical sensations of emotions and provided techniques to self-regulate affective states.

Lyric analysis provided a platform for various verbal processes, including discussion of difficult emotions and experiences, acquisition of healthy coping skills, offering mutual support, and strategizing ways to implement new knowledge.

Creative writing and art-to-music offered experiences in creative exploration of emotions and feelings, and facilitated development of self-esteem.

Session 1: Getting to Know You

Before the group started, the chairs were arranged in a circle and drums were set up along one wall of the room. The therapist met three of the group members on campus to drive them to the clinic. Due to waiting for one person, the carpool group was about 10 minutes late getting to the session. Three other participants were chatting together

Desert Groove Treatment Protocol

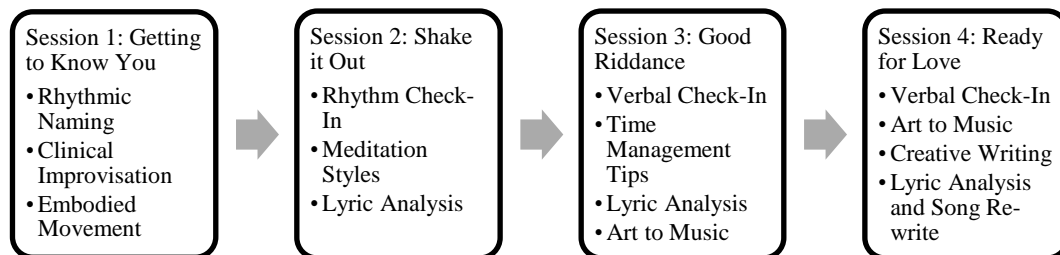


Figure 2. Session Structure

outside the therapy room when the carpool group arrived. The tardiness of three group members plus the researcher made for a rather awkward beginning.

Once everyone was in the room, the therapist welcomed the group and passed out the consent forms and iTunes cards, followed by the surveys. One participant did not show up to this first meeting. The therapist began by providing the group with

information on EMPACT Suicide Prevention Center and the ASU Student Counseling Center. Participants were encouraged to record the information and contact one of the organizations if they became suicidal or felt like they needed more intensive help.

First Intervention

To begin the music therapy process, the therapist showed the participants a variety of drums and explained the difference between the tubanos, congas, and djembes, and then asked each person to choose one. The therapist demonstrated how to play the drums and stated that they could be as creative as they wanted to, provided no one hurt themselves or damaged an instrument. By way of group introductions, the therapist used rhythmic naming so that the group could get to know each other. Each person had to come up with an adjective that started with the same letter or sound as their first name, and then state their name, adjective, and a rhythm to accompany the words used. The therapist demonstrated with her own name: “Bar-ba-ra Bo-da-cious,” hitting the drum on each syllable. Each person took a turn, with the group repeating their name and rhythm two or three times. This intervention created a lot of laughter, which helped the group to relax and feel more comfortable. This also provided discussion of how the different adjectives and rhythms chosen by the participants expressed a lot of information about who they were as individuals. The next intervention was a clinical improvisation. The therapist began to play a slow grounding rhythm, and invited everyone to join in one at a time, each playing whatever rhythm they felt like. The therapist led the group in changing dynamics and tempo. The second piece of rhythm improvisation utilized solos from each member. The group began playing a moderately paced beat, and the therapist

facilitated each person's solo opportunity. At the end of this intervention, when the therapist began the verbal processing, one member, Janie, raised her hand and said that the therapist had skipped her. The therapist apologized and began the group rhythm again to allow Janie a chance to solo. The group then processed what had occurred during the improvisation. One person pointed out that at the beginning the rhythm felt out of sync, but that after a few minutes everyone began to play together in a nice groove, and this ability to come together musically surprised her. Several others nodded agreement at this statement. The next phase of the rhythm improvisation was a leadership improvisation. The group took turns leading the group by playing a small xylophone that was tuned to a C pentatonic scale. Due to time constraints, only three members were able to get turns. The group discussed the differences in each person's approach to the xylophone and how their rhythm and playing style compared. The three who got to lead all mentioned how awkward it was to begin and to end the piece. The group related this to transitions in life.

Closing Intervention

The closing intervention for the first session was embodied problem solving. The group was asked to spend three minutes individually creating a movement or pose to symbolize a problem with which they were currently struggling. The therapist played a soft improvisation on the piano in a pentatonic scale while the group members came up with their movements. Then they were directed to create a movement that symbolized how it would feel to have the problem solved or resolved somehow. Again, soft piano improvisation was provided while the group worked. The participants were able to observe each other's process as they explored the relationship between bodily movement

and emotion. At the session's end, the therapist thanked everyone for participating and dismissed the group. The therapist then drove four of the members back to the main campus.

Session 2: Shake It Out

The second session began much more smoothly than the first. The carpool group arrived on time to the clinic and all seven participants were in attendance. Per protocol, the group began with the BDI and PANAS surveys, which took only 10 minutes due to the exclusion of the other three measurements.

First intervention

The group began by choosing drums and reviewing the rhythmic naming from the previous week, which allowed for introduction of the participant who had been absent the previous week. The group was then asked to take turns playing the drums to express how their week had gone. On each turn, the participant was asked to tell a little about what she had played. Most participants had had busy weeks, and played very fast and/or loud. Several reported having pretty good or neutral weeks and played moderate, steady beats or soft beats interspersed with nail scratches. One participant, Charlene, played a slow, quiet rhythm with lite finger taps. She said that she had ended a relationship with a girlfriend. When the therapist clarified if this was a friendship or a romantic relationship, Charlene said romantic. The therapist acknowledged Charlene's feelings and asked how many people in the group had experienced a break-up before, of either a romance or friendship. Most of the group raised their hands. The group then discussed the feelings involved after a break-up and what helped them get through it. The therapist asked

Charlene to let the group know if they could support her in any way. Charlene replied, “This is supportive, just what we’re doing. It helps to be able to come here and play my feelings, and to hear what other people have experienced.” The last participant, Cadence, played a rhythm that went sporadically from one tempo and dynamic to another, with lots of changes. She said that she had found something out about a friend via a rumor, and did not know if it was true and wasn’t sure what to do. The group discussed this in more general terms, and then advised Cadence to either approach her friend honestly about what she’d heard or to let her friend confide in her when or if she was ready. Cadence decided to allow her friend to approach her about the rumor, and agreed that she should continue being a supportive friend and not judge her friend or assume that the rumor was true.

Second Intervention

After the rhythm circle, the group did several forms of meditation. The therapist first taught them a Kundalini yoga chant called the “Garbage Truck” that could be used for breath and centering (Khalsa, 1998). The meditation began by bringing the thumb and first finger together, then the thumb and middle finger, thumb and ring finger, and thumb and little finger, in rhythm. Next, a chant of simple syllables was added to the fine motor movement. “Sa” went with thumb and first finger, “Ta” with thumb and middle finger, “Na” with thumb and ring finger, and “Ma” with thumb and little finger. This was repeated several times until the group knew the chant. Then everything was put together, repeating the chant with the movement eight times, followed by a short silence to experience the effect on the body and mind. The group voiced enjoyment of the

“Garbage Truck,” with several people commenting on how they liked using vocal sounds and fine motor movement together. The releasing of excess tension was also mentioned as a result of vocalizing the consonants with lots of energy.

The second meditation was a breathing technique called Shitali Breathing, or cooling breath, from Ayurvedic medicine (Lad, 1998). This technique was explained as being beneficial for heartburn, feeling overheated, and calming anger or irritability. The tongue is curled or, for those who cannot curl their tongue, the lips pursed into a very small “O.” The group was instructed to inhale deeply through their curled tongue or pursed lips, swallow, and exhale. After practicing a few times, this pattern was repeated eight times. The group then discussed what effects they noticed from the breathing and it was generally agreed by all that the breath felt very cooling. The group also discussed how the curling of the tongue and then swallowing took intense concentration, freeing the mind of all other thoughts.

The group was then guided in a walking meditation, in which the participants all stood in a circle, facing right. The therapist demonstrated the walking steps by lifting the right foot, shifting the body’s weight, then stepping the right foot to the floor. The pattern is repeated with the left foot. The group practiced the movement slowly for about a minute. Once they had the pattern, the therapist put on rhythmic music and led the group in walking in a circle using the pattern. This meditation lasted about 3 minutes, the length of the chosen song. Afterward, the participants discussed how the walking pattern required a great deal of concentration. Several people stated that they liked the movement aspect, as it aided their ability to clear their mind and focus on one element.

The fourth meditation technique was an ecstatic dance meditation. The group was asked to stand in a circle facing away from each other, with lots of space in between each person. This configuration was used to keep the participants from being able to see each other dancing. The group was instructed to listen to the rhythm of the music and allow their body to move however it felt natural, without trying to plan their movements or worry about the other women seeing them. The music was started and the group danced for about three minutes, the duration of the song. The group then discussed how they felt during and after the dance meditation. Several women mentioned that they did not care for the dancing, because they felt weird and had trouble losing their self-consciousness, even though the women were specifically not looking at each other during the dancing. A couple of women liked the dancing and said that they would use this form of meditation, but clarified that they would only feel comfortable doing this at home with no one else around.

The final meditation was a guided meditation based on the chakra model, created by the therapist and a friend who was a Yoga instructor. This meditation included feeling various sensations in the body, recalling specific memories related to the different body regions, and visualizing a rainbow of energy along the spine. The guided meditation took about 15 minutes and completely changed the energy and dynamic of the group. When asked what the experience was like, Charlene said, “I like anything about the Chakras. That’s a model that really works for me and how I understand myself. I got really relaxed and even though some of the feelings I had were not pleasant, I was able to acknowledge them and replace them with something positive.” Shayla stated that she felt

“very floaty, like I left my body and was floating on the ceiling, looking down on the group and smiling. I feel awesome.” Several other women nodded agreement. Estelle and Beth, so far very quiet in group, both volunteered that they enjoyed it and got simultaneously relaxed and energized. The group all said that they would like a recording of the meditation included on the group CD.

Closing Intervention

The last intervention for this session was a lyric analysis of *Shake It Out* by Florence + the Machine. Lyric sheets were passed around, with instructions to read along while listening to the song and to circle or underline any lines that stood out or seemed relevant to the participants. The recording was then played on the iPod. The group discussed the different themes of the song and how it related to each member’s life. Charlene highlighted the lines, “I am done with my graceless heart/so tonight I’m gonna cut it out and then restart.” She felt that this was relevant to her own break-up and how sometimes you have to start over by removing things that aren’t working. Even though the words sound violent, the group likened these lines to performing surgery to remove unhealthy parts and improve overall health. Amanda circled the first line, “regrets collect like old friends,” saying that she had been holding on to negative people in her life and was realizing that she needed to let them go. She stated, “I regret trying to maintain friendships that aren’t good for me.” Charlene related this line to friends promising to get together, but never following through. She also spoke of letting go of a negative presence in her life. Janie pointed out the line, “I’m always dragging that horse around” and said that she thought that was a reference to “getting rid of heavy thoughts or

unproductive thoughts about the past” or worrying about things you cannot control. Cadence said that the chorus, “Shake it out” felt very freeing, like relieving a burden. Janie suggested that the percussion-heavy accompaniment was like a heartbeat and that the organ reminded her of the wind blowing and changing. After the discussion, the group re-created the song using drums and shakers. The therapist led the song by singing and playing the electric piano on the organ setting. The participants joined enthusiastically by singing and drumming. Afterward, the group was energetic and happy, and said how they enjoyed playing the song together. When asked what kinds of other problems they wanted to explore in the next session, Janie requested “time management.” This request was seconded by the other participants.

Session 3: Good Riddance

Amanda was absent for session three. The rest of the group spent the first ten minutes completing the BDI and PANAS surveys.

First Intervention

The group began by discussing time management skills, which several participants had previously mentioned was causing them great deals of stress. An article printed from the U.S. News Education blog entitled “Professor’s Guide: Top 12 Time-Management Tips” by Lynn F. Jacobs and Jeremy S. Hyman (2013) provided ideas for participants to discuss about how to manage their schedules more effectively. Discussion centered around which tips the participants felt they could utilize and which ones seemed unrealistic or inappropriate for the women’s individual personalities and lifestyles. Participants also shared organizational tips from their own experience.

Second Intervention

Next, the group engaged in a lyric analysis of “Good Riddance” by Greenday, which was sung and played live by the therapist. Themes from this song included moving forward, enjoying life in the moment, and changing one’s views on unpredictability and change. Shayla pointed out that the lines, “Take the photographs and still frames in your mind/Hang it on a shelf in good health and good time” reminded her of the good memories she had and that she should reflect on these without losing her sense of purpose. Charlene said that the song made her think how college has been a reality check for her. “I thought I’d have things figured out, but I have no clue.” Beth stated how she loved this song because Greenday was one of her parents’ favorite artists and they listened to their music a lot when Beth was growing up. The therapist played the song again, this time with the group singing along.

Closing Intervention

After discussing the feelings and memories evoked by the song, the therapist explained that they would each come up with their own albums of music that could be used to regulate mood and help transition through a crisis. The therapist laid out various art supplies, including chalk and oil pastels, colored pencils, and markers, along with art sheets titled “Personal Recovery CD.” The therapist explained that this art sheet was for each person to come up with songs that might be meaningful for them in managing their stress, anxiety or depression. The worksheet had lines to write down songs or artists, a blank square the size of a CD jewel case, and blank circle the size of a CD. Once the participants completed their artwork for their CD, they could cut out the art and attach it

to the CD that would be provided at the study's completion. The therapist then put on soft music and let the group work on their art until the end of the session. The participants all seemed to enjoy the artwork, chatting comfortably about the songs they were choosing and about general things that were happening with school.

Session Four: Ready for Love

The final session occurred on Valentine's Day, and included all members except Shayla, who was spending the evening with her husband. To maximize time for this final session, the group had previously completed all five surveys for this week via email. The group first filled out a demographic survey, which was then collected by the therapist.

First Intervention

The session began with a check-in to see how everyone was feeling. Cadence stated that she had experienced a very bad week, and spoke of her academic struggles and financial problems related to her mother's alcoholism. She worried that she would have to leave school because she could not pay what she owed in tuition. The rest of the group offered emotional support and discussed the stresses of having an alcoholic or uninvolved parent. Cadence became teary-eyed and said that just being able to talk about it was helpful. She was later privately provided with information on the ASU counseling center and encouraged to find a support group such as Adult Children of Alcoholics or Al-Anon.

Second Intervention

The second intervention included completing the personal recovery CD from the previous week. The therapist put on recorded soft music and passed out art supplies. The group then worked on completing their CD song list and artwork. Blank drawing paper

and a poetry worksheet entitled, “I Am,” were set out for those who were already finished with their recovery CD. During this time, the group engaged in non-directed conversations about music and about a class that several members were in. The group decided that they should exchange numbers and emails and keep in touch with each other. After everyone had a chance to complete their art and poetry, the group shared some of their chosen songs and lines from their poems.

Final Intervention

The final intervention for the group was a lyric analysis, using “Ready for Love” by India.Arie. The therapist sang and played the song live, then facilitated discussion of how the song lyrics related to making changes in life. Cadence noted the line, “All of the joy and the pain,” and said that change is hard work, “but it is worth it to make the effort if it means better health or being a better person.” Amanda said that the line, “lately I’ve been thinking maybe you’re not ready for me,” reminded her of trying to get over a depression and not having the social support to do so. She stated, “It’s hard to come out of a slump without support.” Charlene related the song to how challenging it is to keep going when you are presented with lots of obstacles. Janie mentioned the lines, “they say watch what you ask for, cause you might receive/but if you ask me tomorrow, I’ll say the same thing,” and said that sometimes you have to knowingly take a risk in order to achieve something you want. The group then spent about ten minutes re-writing the song, using the changes they wished to make. Afterward, each participant shared one stanza from their re-written song and the therapist put their words into the song. The following titles emerged from the group:

- Cadence = “Ready for Success”
- Janie = “Ready for Time Control”
- Charlene = “Ready for Assurance”
- Emily = “Ready for Self-Acceptance”
- Beth = “Ready for Self-Love”
- Amanda = “Ready to Be Me”

Some of the negative things the group members planned to give up in order to achieve these positive changes included defenses, worries, and restless thoughts. At the group’s end, the therapist asked the participants to circle up and hold hands, and thanked each person for being involved in the group.

Post-treatment

Several days after the final session, the therapist met with Shayla to collect her final survey since she had been absent for the last group. Shayla mentioned that during the embodied movement intervention in the first session, she was able to release some emotion about a recent surgery that she had not known she still had. As a dancer, Shayla said, “I realized I hadn’t danced about it. I was still carrying around those feelings and wasn’t aware of it until we did that technique.” She expressed gratitude for having the opportunity to connect with her feelings through movement.

Several other participants communicated through emails to the therapist that they had learned a lot and felt better able to manage the rest of the semester. Janie emailed that she wished the group could continue for the remainder of the school year and even

into the summer, and suggested that a group reunion was in order in the spring. Several other participants agreed with this idea.

Charlene wrote in an email, “Thank you so much for such a lovely experience. It was very beneficial to me, especially at this time, and though not all of those tests might completely reflect it, I am feeling a lot better and really enjoyed those get-togethers. It was a wonderful tension reliever and a lot of fun.” Janie wrote, “I am so glad I had the privilege to work with you and the other girls! You are so wonderful and I think the music therapy/support group has been really helpful to my college experience as a whole! So thank you so much! P.S. We should definitely have a reunion sometime!”

Quantitative Analysis

Procedure

Pre- and post-treatment data were collected from the treatment and control groups in the form of surveys chosen to test depression, anxiety, affect, and overall behavioral health. Five instruments were chosen based on length, reliability and validity. The Beck Depression Inventory, or BDI, is a short, 21-item questionnaire with high rates of internal consistency and is a standard measurement of depression (Beck & Steer, 1984). The State Trait Inventory for Cognitive and Somatic Anxiety (STICSA) - State and Trait versions are two related 21-item surveys chosen for their ability to measure anxiety symptoms in their complex forms. The state version allows for the measurement of week-to-week, mood-based anxiety, whereas the trait version allows for measurement of anxiety as a personality trait. Thus, if the STICSA-Trait version shows change over time, the indication is that the therapy can create change in personality, not just in emotional state, cognition, or coping skills (Gros et al., 2007). The Positive and Negative Affect

Schedule, or PANAS, is a 20-item survey that measures changes in overall positive and negative affect, and has high rates of internal consistency (Watson et al., 1988). The final measure was the Ryff's Scales of Psychological Well-Being, or PWB (Ryff, 1989). This longer measure contains six subscales associated with general mental health and well-being, including self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. Each subscale has 9-12 questions. The PWB was chosen for this study to measure aspects of mental health that relate to depression, anxiety and affect but are not directly tested by the other instruments. Short demographic surveys were also collected during the final week of the study.

To test instrument reliability for this sample, Cronbach's alpha values were computed for each measure, including STICSA (state and trait versions), BDI, and for the autonomy, environmental mastery and self-acceptance subscales of the Ryff's PWB. Cronbach's scores higher than .700 are considered to be reliable, meaning that each subscale's items hang together for the studied population. With the exception of PANPOS (the positive subscale of the PANAS), all scales demonstrated high internal consistency, as shown in Table 1. Reliability for PANPOS calculated with all 10 items demonstrated lower than expected reliability, because two items ("excited" and "determined") were negatively rather than positively related to the total scale score. Reliability of the PANPOS was recalculated, dropping these two items, and the resulting Cronbach's alpha improved to a reliable score (see Table 1).

Table 1

Cronbach's scores at pre-treatment for all study measures (N=14)

State ANX	Trait ANX	BDI	AUT	ENM	SAC	PANPOS*	PANNEG*
.913	.900	.830	.852	.750	.942	.715	.838

Note: State ANX= State-Trait Inventory for Cognitive and Somatic Anxiety – State Version
 Trait ANX = State-Trait Inventory for Cognitive and Somatic Anxiety – Trait Version
 BDI = Beck Depression Inventory
 AUT = Autonomy subscale of Ryff's Scales of Psychological Well-Being
 ENM = Environmental Mastery subscale of Ryff's Scales of Psychological Well-Being
 SAC = Self-Acceptance subscale of Ryff's Scales of Psychological Well-Being
 PANPOS = Positive and Negative Affect Schedule – positive subscale with items 3 and 16 removed
 PANNEG = Positive and Negative Affect Schedule – negative subscale
 *PANAS pre-treatment measures were obtained for only 13 of the 14 subjects due to one subject not turning in this particular survey

Pre-Treatment Mean Scores

T-test comparisons between groups for all measures at pre-treatment showed no significant differences between the two groups (all $ps < .05$). It appears that randomization was successful and that the two groups, therefore, had no major differences prior to implementation of the protocol. Mean pre-treatment scores are shown in Table 2.

Table 2

Pre-Treatment Mean Scores and Standard Deviations for Treatment and Control Groups

SCALE	TREATMENT	CONTROL	TOTAL	SD	N
State ANX	1.5850	1.8980	1.75	.54	14
Trait ANX	2.0204	2.1156	2.07	.50	14
BDI	.4660	.4619	.46	.31	14
SAC	2.8194	3.0000	2.92	.714	13*
AUT	2.6494	2.9610	2.81	.66	14
PRG	3.1558	3.1558	3.16	.273	14
ENM	2.6952	2.9857	2.84	.498	14
PIL	3.7000	3.8143	3.76	.306	14
PRE	2.6825	2.6825	2.68	.655	14
PANNEG	2.6500	2.1000	2.35	.74	13*
PANPOS	2.7292	2.7321	2.73	.56	13*

Note: State ANX = State-Trait Inventory for Cognitive and Somatic Anxiety – State Version

Trait ANX = State-Trait Inventory for Cognitive and Somatic Anxiety – Trait Version

BDI = Beck Depression Inventory

SAC = Self-Acceptance subscale from Ryff's Scales of Psychological Well-Being

AUT = Autonomy subscale from Ryff's Scales of Psychological Well-Being

PRG = Personal Growth subscale from Ryff's Scales of Psychological Well-Being

ENM = Environmental Mastery subscale from Ryff's Scales of Psychological Well-Being

PIL = Purpose in Life subscale from Ryff's Scales of Psychological Well-Being

PRE = Personal Relations subscale from Ryff's Scales of Psychological Well-Being

PANNEG = Positive subscale from Positive and Negative Affect Schedule

PANPOS = Negative subscale from Positive and Negative Affect Schedule

Pre-Post Changes – T-test for Group Differences

Paired t-tests comparing groups in the magnitude of change were conducted for each subscale between Time 1 (pre-treatment) and Time 3 (post-treatment). Follow-up measures were collected 5 weeks post treatment, with 50% of subjects completing the follow-up surveys. Paired t-tests were also conducted for Time 3 and Time 5 to determine maintenance of results. These scores are summarized in Table 3. No results reached statistical significance, but the directions showed small changes. For the subscales of State Anxiety and Negative Affect, the control group's mean scores increased, while the treatment group's mean scores decreased, indicating that the

intervention group showed improvement in general and anxious negative affect. Similarly, for subscale Personal Growth, the control group's mean scores decreased and the treatment group's mean scores increased. For the subscales of Trait Anxiety, Depression, Self-Acceptance, and Autonomy, the mean scores of both groups decreased. For the subscales of Environmental Mastery, Purpose in Life, Personal Relations, and Positive Affect, the mean score for both groups increased. For subscales Positive Affect, Negative Affect, and Depression, the results were maintained at follow-up. The Depression and Negative Affect scores were even lower at follow-up (Time 5) than at post-treatment (Time 3).

Table 3

Pre and Post Levels and Pre-to-post Change of Study Measures for Treatment and Control Groups

Subscale	Treatment			Control		
	Pre	Post	Change	Pre	Post	Change
STATE ANX[^]	1.51	1.33	-.18	1.59	1.68	+.09
TRAIT ANX[^]	2.10	1.64	-.46	2.03	1.24	-.79
BDI[^]	.47	.18	-.29	.46	.14	-.32
NEG[^]	2.43	1.80	-.63	1.70	1.77	+.07
AUT[*]	2.75	2.55	-.20	3.15	2.73	-.42
PRG[*]	3.18	3.41	+.23	3.48	3.30	-.18
ENM[*]	2.65	2.97	+.32	3.10	3.13	+.03
PIL[*]	3.70	4.08	+.38	3.73	4.00	+.27
PRE[*]	2.22	2.58	+.36	2.74	3.26	+.52
SAC[*]	3.00	2.77	-.23	3.31	2.72	-.59
POS[*]	2.47	2.93	+.46	2.79	2.91	+.12

Note:

State ANX = STICSA-State Version
 Trait ANX = STICSA-Trait Version
 BDI = Beck Depression Inventory
 NEG = Negative subscale of PANAS
 AUT = Autonomy subscale of PWB
 PRG = Personal Growth subscale of PWB

ENM = Environmental Mastery subscale of PWB
 PIL = Purpose in Life subscale of PWB
 PRE = Personal Relations subscale of PWB
 SAC = Self-Acceptance subscale of PWB
 POS = Positive subscale of PANAS

[^]These items are negative scales, hypothesized to decrease with treatment.

^{*}These items are positive scales, hypothesized to increase with treatment.

Demographics

Demographic information was obtained via short, researcher-designed surveys which inquired into four demographic domains, including age, major, ethnic/cultural identification, and year in school. A fifth domain regarding musical involvement was added after responses from the treatment group indicated it might be a motivational factor in the subjects' choosing to participate in this study. Of the fourteen subjects, six of the treatment subjects were involved in music ensembles or lessons at the university, as were four of the control subjects. Two control subjects were music majors; none of the experimental subjects were. Other subjects' majors included nursing, engineering, sustainability, education (two), dance, art, creative writing, business, psychology (two), and music theater direction. One subject was a third year undergraduate and another was a first year master's student. The remaining subjects were undergraduates in their first or second year. The age range was 17-32, with a mean of 20.6 years. The racial/cultural identification was predominately listed as white/Caucasian, with two subjects listing Hispanic and one each listing African-American, Asian-American, and Jewish.

Chapter 5

DISCUSSION

Results from this study indicate that group music therapy may be an effective, reliable, and valid treatment option for college women with depression and anxiety. Music therapy was adaptable to the stressful issues with which the participants were struggling. For example, one participant was dealing with unresolved emotion related to an elective surgery she had undergone several months prior. This participant specifically mentioned several of the music therapy techniques that helped her to work through and resolve this emotion. Another participant was frustrated with the emotional and financial burdens of having an alcoholic parent who could not be relied upon to handle the monetary aspects of her daughter's college education. Through processing this issue with the group, this participant was able to get emotional support and practice healthy coping skills. Even though these two themes were very specific to the affected participants, the modality of music therapy was easily adapted to address these issues, without sacrificing other, more common stressors.

Group cohesion and support increased visibly during the four sessions. This cohesion and support was seen via increasing interaction with each other during the sessions. The participants were naturally a bit apprehensive and hesitant during the initial session, and needed prompting by the therapist to respond to each other. During the second session, participants began responding to each other's comments rather than waiting for the therapist to facilitate response. They offered each other supportive comments, feedback, and advice, often empathizing by relating their own experience with

a similar issue. The group bond was also evident in the participants' choosing to share email addresses and phone numbers with each other and their suggestions to get together for a reunion. Several participants expressed wishes that the group could continue all semester and even into the summer. Age and year in school also facilitated bonding. Most of the group were freshman or sophomores and ranged in age from 17-19. This relative homogeneity allowed for greater bonding and empathy between the participants, as they were experiencing similar stressors and roles. Having one participant who was 32 and a third year, non-traditional student helped to bring a unique perspective to the other participants. The older group member was able to give more advice about things she had experienced, such as ending relationships, the importance of learning healthy coping skills during youth, and showing that stressful situations do not last forever.

The interventions that seemed to have the greatest effect were clinical improvisation, lyric analysis, and meditation. These interventions showed the most dramatic changes in terms of the energy of the group, the group dynamics, and the things that participants talked about most at follow-up. The clinical improvisation, which was done with multicultural percussion instruments, was the initial technique that introduced the group to each other. The drums provided a safe way for the women to express themselves and get to know each other without conversation. The women's personalities came out on the drums, which provided a foundation on which they could explore patterns and roles in their lives. The meditation provided much-needed stress reduction and taught the participants skills for self-care. During these techniques, the group explored different ways of approaching meditation, allowing each woman to find a

technique that worked for her. The lyric analyses provided an opportunity to discuss stressful themes related to depression and anxiety. These songs allowed the group to begin processing their experiences in a safe way, by first viewing the themes through the songwriters' perspective and then relating the lyrics to themselves. Lyric analysis allowed the group to explore group dynamics, express uncomfortable feelings and thoughts, and practice healthier cognitive and behavioral skills. It also gave the group a chance to "hear" the music in a new way, which is something they can do in the future on their own when using music as a tool for self-care. Certain interventions were effective for specific subjects, such as the embodied problem-solving for the dancer, and art-to-music for the two quieter subjects. However, all of the subjects responded enthusiastically to improvisation, meditation, and lyric analysis.

At follow-up, several women mentioned how much they had learned from the sessions and that they felt more socially connected. One participant stated that, though her surveys might not reflect it, she felt much less depressed and anxious after going through the treatment protocol. Another said that she felt like she had learned some good skills to help her manage stress and anxiety.

The quantitative data reflect these positive changes. The group's scores on Beck's Depression Inventory decreased between the first and fourth session. This was maintained at 5 weeks follow-up. Anxiety and negative affect scores also decreased. Not only were results in these three domains maintained at follow-up, but depression scores were even lower at follow-up than immediately post-treatment, suggesting that the participants may have learned behavioral and cognitive skills that continued to benefit

them after the end of the treatment protocol. These results, though not statistically significant, suggest that the music therapy was effective at decreasing depression and anxiety scores, in accordance with the research hypotheses.

Positive affect scores increased and were maintained at follow-up. Certain positive subscales on the Ryff's Scales of Psychological Well-Being also increased, including personal growth, environmental mastery, purpose in life, and personal relations. These can be explained by the psychological domains addressed by group music therapy. The group process facilitates improvement in personal relations and personal growth because of the support network that forms and the exploration of personality that occurs during group therapy, as well as the introduction of new music and expressive arts skills. The domains of environmental mastery and purpose in life are addressed in music therapy through increasing self-esteem/self-efficacy and learning and practicing healthy behavioral and cognitive strategies. These results were also consistent with the research hypotheses.

The fact that the control group also showed gains in some areas limits the ability to attribute all of the positive effects to the music therapy treatment. Several other factors may explain these gains, such as the passage of time, the cycle of the school semester, or unknown confounds. Perhaps simply monitoring themselves through the completion of the surveys imparted some benefits to the control subjects.

Two domains in which the results were not consistent with the research hypotheses were self-acceptance and autonomy. These results may have been seasonally confounded by the point in the semester during which the therapy occurred. The sessions

began the third week of the spring semester, when stress levels and academic pressures are not yet in full swing, and finished the week before spring break, at which time students are typically very stressed and ready for a break. Follow-up data was obtained the week after spring break, when students are forced back into the stress of school after a week off. Mid-semester stress may decrease feelings of autonomy and self-acceptance because students are very much at the mercy of their instructors, who get to set the structure of the classes, create the grading paradigms, and rate student performance. This is also the time of the semester when academic problems tend to surface, since most classes have had their first tests, papers, or projects due and the students have by now received feedback about their academic performance thus far. This timing of the therapy sessions may thus have impacted the survey results. It is interesting to note that the treatment subjects' autonomy and self-acceptance scores showed less decrease than the control group, indicating that the music therapy may have protected the treatment subjects from even lower scores in these positive domains.

In accordance with hypotheses, three domains showed treatment group changes in the opposite direction from the control group. For the STICSA-State Version, the treatment group showed a moderate decrease in anxiety, while the control group had a moderate increase. This pattern also held for negative affect. The treatment group increased in the domain of personal growth, whereas the control group slightly decreased. These three domain results suggest that the music therapy had a positive effect on the treatment subjects' psychological health, which might have shown similar decreases as the control group if the subjects had not received the therapy.

Although both groups showed improvement in the domains of environmental mastery and positive affect, the trends suggested that the treatment group showed greater increases in these areas than the control group. This result again suggests that music therapy aided in the mental health and well-being of the treatment group.

Some challenges with this study came from the limited timespan of the treatment protocol. Being a short-term protocol, the music therapy may not have had time to effect major changes in the quantitative data. There were also some possible effects from non-controllable variables, such as the cycles of the academic semester or simple time effects.

Additionally, due to recruitment difficulties, none of the subjects in either group had clinical levels of depression or anxiety. All of the subjects were doing fairly well in terms of their mental health from the beginning of the study. This may explain why the quantitative results were not statistically significant, and also why some domains showed changes in unexpected directions. A replication study which recruits young women who are at or near clinical levels of disorder would be expected to find statistically significant changes. Future research in this area should conduct a music therapy protocol through an entire semester, or even an entire academic year, with subjects who are clinically depressed or anxious to adjust for seasonal effects and draw more informed conclusions about treatment effects.

Another challenge came with getting timely survey responses from the control group. Because this group's participation in the study was almost entirely via email, there was no way to control how quickly subjects returned their surveys. This meant that there was no way to know for sure if a subject who turned in her late week-3 surveys with

her week-4 surveys had actually done the surveys at the same time or even in opposite order rather than a week apart. It also meant that some surveys were never collected from one or two subjects who forgot to complete them one week. An improvement for repetitions of this study would be to have the control group meet at an appointed time and place to complete their surveys in person. This also means that any missing data, such as the back side of double-sided surveys, could be identified and collected.

This study shows promising results overall, suggesting that music therapy might be a very valid and reliable treatment option for female college students with mental health problems. It is also cost-effective in several ways. It is done in groups, which lowers the per-person cost. If implemented by music therapy degree programs in a similar manner as counseling and clinical psychology programs, where students offer low-cost therapy as part of their clinical training hours, the cost is even further reduced. The setting for this particular study is rather unique in that the university has a separate music therapy clinic, which is jointly run by a non-profit music therapy agency. This clinic provided the space and instruments for the treatment protocol. Although most universities do not have this type of clinical set-up, it seems reasonable that a music therapy degree program could arrange to have certain classrooms in the music building or another campus facility set up for music therapy students to conduct supervised practicums, wherein university students with depression or anxiety would be able to seek treatment. Music therapy students could lead one or two groups a week, either in pairs or individually, under the supervision of a faculty member, graduate student, or other board-certified music therapist. This is already required by the music therapy curriculum. It is

simply not offered as yet to fellow university students. Treatment in these music therapy groups could be no-cost to the students seeking music therapy, could include a small fee of \$15 or \$20 dollars for a semester's worth of music therapy, or could include a drop-in fee of \$2-3 a session. This modest fee could then be put directly into the music therapy program to maintain the groups every semester. No matter how the program is implemented, it would provide an important service to the university community. This study makes clear that offering music therapy to female college students with depression and anxiety is a valid, reliable, and appropriate treatment option.

There is much additional research to be done in the area of college students and music therapy. Further study might simply extend the present protocol to a semester-long study, which would help to address the possible confound of the ebb and flow of the college semester. Based on the feedback from the present study's participants, this would be an excellent modification. Another form this type of research should take is to design randomized controlled trials (RCTs) for the music therapy protocols. RCTs are considered the scientific standard in medical and psychological research, and would go a long way to convince program administrators to implement music therapy services in their institutions. There are very few RCTs in music therapy research, which is a hindrance to many administrators and non-music therapy researchers who are invested in the current medical model to lending their support to the promotion of music therapy as a viable treatment option.

It would also be useful to conduct research comparing female and male college students with depression and anxiety to determine if there are gender differences in

response to music therapy. More studies could also explore specific music therapy modalities, such as BMGIM, Nordoff Robbins, or CBT-based music therapy, or could explore the use of specific techniques, including lyric analysis, improvisation, ethnomusicology education, or songwriting. Another possibility for further research is to combine music therapy with conventional psychotherapy by having a group that is co-led by a music therapist and a clinical psychologist or professional counselor. This might lead to greater collaboration between different academic departments, which would facilitate positive growth for both areas. The combined resources of two or three departments might allow for more students with mental or behavioral health problems to receive low-cost, effective treatment.

There is much room for further research in the use of music therapy to treat depression and anxiety in female college students. It is hoped that this study will represent the beginning of research in this area, and will help to convince college program directors and administrators to begin offering music therapy services to their students.

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APPENDIX A
CONSENT FORM

**INFORMED CONSENT FORM (SOCIAL BEHAVIORAL)
MINIMAL RISK
ARIZONA STATE UNIVERSITY**

CONSENT FORM

The Use of Group Music Therapy to Alleviate Depression and Anxiety in College Women (hereafter known as Desert Groove Music Group)

INTRODUCTION

The purposes of this form are to provide you (as a prospective research study participant) information that may affect your decision as to whether or not to participate in this research and to record the consent of those who agree to be involved in the study.

RESEARCHERS

Professor Barbara Crowe, MT-BC, MMT - Director of Music Therapy, ASU School of Music and
Barbara Ashton, MT-BC – Music Therapy Master's Student, ASU School of Music has invited your participation in a research study.

STUDY PURPOSE

The purpose of the research is to determine the effect of short-term group music therapy on the depression and anxiety symptoms of female university students. Music therapy groups are often used in other areas of health and well-being, but currently there are no studies that explore the use of group music therapy to help college women who are experiencing depression or anxiety. The researchers would like to determine whether universities that have music therapy programs would be benefitted by providing music therapy to students with emotional distress.

DESCRIPTION OF RESEARCH STUDY

If you decide to participate, then you will join a study that investigates the use of group music therapy for depression and anxiety symptoms in female college students.

If you say YES, then your participation will last for 8 weeks total, consisting of 4 weeks of 1 90-minute music therapy session per week and a short follow-up interview via phone or email 1 month later. You will be asked to participate in the following activities: playing percussion instruments, gentle yoga and stretching, dance forms such as hip-hop and bellydance, art-to-music, music listening and discussion, music-based relaxation, and creating music using Garage Band software. No musical experience is required. The music therapist will lead you in all group activities and will give you everything you need to participate. Activities will be chosen based on group preferences and needs. There will be verbal discussion of your emotional state and coping skills, and you will be asked to interact with other group members. In addition to the music activities, you will be asked to complete several surveys relating to depression, anxiety, and coping skills once a week and again at follow-up. These surveys will be short, taking 5-10 minutes each to complete. The time will be agreed upon by all subjects once recruitment is complete. Sessions will take place at the Community Services Building, 200 E Curry Rd, Tempe 85281, about a 5-minute drive from the ASU main campus. If enough subjects are

recruited, you will be randomly assigned to either the above experimental group or to a control group. If placed in the control group, you will fill out the same surveys mentioned above once a week for 4 weeks and again at follow-up 1 month later.

RISKS

There is a slight risk that things you say in the music therapy group might not remain confidential. To minimize this risk, all subjects in the group will sign a confidentiality form and will verbally promise to keep all information shared in the group confidential. It is also possible that the music activities will cause uncomfortable feelings or memories to arise. This risk will be minimized by the presence of the trained, board-certified music therapist, who will be able to help you process negative feelings should they come up.

BENEFITS

The possible/main benefits of your participation in the research are having fun, improvement in depression and/or anxiety symptoms, increased social support, improved coping skills, and better ability to manage negative emotions. You may also learn new coping skills or hobbies that will enhance your quality of life.

CONFIDENTIALITY

All information obtained in this study is strictly confidential. The results of this research study may be used in reports, presentations, and publications, but the researchers will not identify you. In order to maintain confidentiality of your records, Barbara Crowe and Barbara Ashton will use a code name for the group, "Desert Groove Music Group", instead of the above study title to mark the study location. All group members will be asked to use this code name when talking of the study outside the group. Data collection will consist of both numerical scores from surveys and verbal information from the group discussions. Each subject will be referred to by first name only and all names and identifying information will be changed in any published documents about the study. Each subject will be assigned an easily-remembered number (using your birthdate and last four digits of your phone number) to identify surveys. Each subject's identifying information will also be coded numerically during data analysis so that no identification of any subject will be possible by anyone other than the researchers. All subject information and data, including emails, will be kept in a secure, password-protected file on the researcher's laptop. Only the two researchers listed above will have access to the information. Once the study is completed, all data and information will be wiped from the hard drive and any physical documents will be destroyed. There will be no audio or videotaping of the sessions and no photographs will be taken.

Again, due to the nature of the music therapy group, the researchers cannot guarantee complete confidentiality of anything said in the group. It may be possible that others will know what you have said in the music therapy group. In order to minimize this risk, each subject will be asked to sign a confidentiality form at the beginning of the study.

WITHDRAWAL PRIVILEGE

Participation in this study is completely voluntary. It is ok for you to say no. Even if you say yes now, you are free to say no later, and withdraw from the study at any time. Your decision will not affect your relationship with Arizona State University or otherwise cause a loss of benefits to which you might otherwise be entitled. Nonparticipation or

withdrawal from the study will not affect your grades or your ability to receive any university services.

COSTS AND PAYMENTS

There is no payment for your participation in the study. However, each subject will receive a \$10 iTunes card, as well as a personalized CD of music used and created in the music therapy group at the end of the study.

VOLUNTARY CONSENT

Any questions you have concerning the research study or your participation in the study, before or after your consent, will be answered by: Barbara Ashton, MT-BC; phone number: 512-809-9638; email: musictherapybabs@gmail.com.

If you have questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk; you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at 480-965 6788.

This form explains the nature, demands, benefits and any risk of the project. By signing this form you agree knowingly to assume any risks involved. Remember, your participation is voluntary. You may choose not to participate or to withdraw your consent and discontinue participation at any time without penalty or loss of benefit. In signing this consent form, you are not waiving any legal claims, rights, or remedies. A copy of this consent form will be given (offered) to you.

Your signature below indicates that you consent to participate in the above study.

Subject's Signature

Printed Name

Date

Legal Authorized Representative
(if applicable)

Printed Name

Date

INVESTIGATOR'S STATEMENT

"I certify that I have explained to the above individual the nature and purpose, the potential benefits and possible risks associated with participation in this research study, have answered any questions that have been raised, and have witnessed the above signature. These elements of Informed Consent conform to the Assurance given by Arizona State University to the Office for Human Research Protections to protect the rights of human subjects. I have provided (offered) the subject/participant a copy of this signed consent document."

Signature of Investigator _____

Date _____

APPENDIX B

SURVEY INSTRUMENTS

STICSA - Your General Mood State

Study ID:

Instructions: Below is a list of statements which can be used to describe how people feel. Beside each statement are four numbers which indicate **how often each statement is true of you** (e.g., 1=*not at all*, 4=*very much so*). Please read each statement carefully and circle the number which best indicates **how often, in general, the statement is true of you**.

	A Little	Moderately	Very Much So	Not at all
1. My heart beats fast.	1	2	3	4
2. My muscles are tense.	1	2	3	4
3. I feel agonized over my problems.	1	2	3	4
4. I think that others won't approve of me.	1	2	3	4
5. I feel like I'm missing out on things because I can't make up my mind soon enough.	1	2	3	4
6. I feel dizzy.	1	2	3	4
7. My muscles feel weak.	1	2	3	4
8. I feel trembly and shaky.	1	2	3	4
9. I picture some future misfortune.	1	2	3	4
10. I can't get some thought out of my mind.	1	2	3	4
11. I have trouble remembering things.	1	2	3	4
12. My face feels hot.	1	2	3	4
13. I think that the worst will happen.	1	2	3	4
14. My arms and legs feel stiff.	1	2	3	4
15. My throat feels dry.	1	2	3	4
16. I keep busy to avoid uncomfortable thoughts.	1	2	3	4
17. I cannot concentrate without irrelevant thoughts intruding.	1	2	3	4
18. My breathing is fast and shallow.	1	2	3	4
19. I worry that I cannot control my thoughts as well as I would like to.	1	2	3	4
20. I have butterflies in the stomach.	1	2	3	4
21. My palms feel clammy.	1	2	3	4

Note. From State-Trait Inventory for Cognitive and Somatic Anxiety (STICSA)—Trait Version, 2000, Perth, Australia: The University of Western Australia. Copyright 2000 by Melissa J. Ree, Colin MacLeod, Davina French, and Vance Locke. Reprinted with permission.

Instructions: Below is a list of statements which can be used to describe how people feel. Beside each statement are four numbers which indicate the degree with which each statement describes your **mood at this moment** (e.g., 1=*not at all*, 4=*very much so*). Please read each statement carefully and circle the number which best indicates **how you feel right now, at this very moment, even if this is not how you usually feel**.

	A Little	Moderately	Very Much So	Not at all
1. My heart beats fast.	1	2	3	4
2. My muscles are tense.	1	2	3	4
3. I feel agonized over my problems.	1	2	3	4
4. I think that others won't approve of me.	1	2	3	4
5. I feel like I'm missing out on things because I can't make up my mind soon enough.	1	2	3	4
6. I feel dizzy.	1	2	3	4
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Note. From State-Trait Inventory for Cognitive and Somatic Anxiety (STICSA)—State Version. Perth, Australia: The University of Western Australia. Copyright 2000 by Melissa J. Ree, Colin MacLeod, Davina French, and Vance Locke. Reprinted with permission.

The Positive and Negative Affect Schedule (PANAS; Watson et al., 1988)

PANAS Questionnaire

This scale consists of a number of words that describe different feelings and emotions. Read each item and then list the number from the scale below next to each word. **Indicate to what extent you have felt like this in the past 7 days.** Use the scale below to rate your responses.

1	2	3	4	5
Very slightly or not at all	A little	Moderately	Quite a Bit	Extremely

- | | |
|-----------------------|----------------------|
| _____ 1. Interested | _____ 11. Irritable |
| _____ 2. Distressed | _____ 12. Alert |
| _____ 3. Excited | _____ 13. Ashamed |
| _____ 4. Upset | _____ 14. Inspired |
| _____ 5. Strong | _____ 15. Nervous |
| _____ 6. Guilty | _____ 16. Determined |
| _____ 7. Scared | _____ 17. Attentive |
| _____ 8. Hostile | _____ 18. Jittery |
| _____ 9. Enthusiastic | _____ 19. Active |
| _____ 10. Proud | _____ 20. Afraid |

Scoring Instructions:

Positive Affect Score: Add the scores on items 1, 3, 5, 9, 10, 12, 14, 16, 17 and 19. Scores can range from 10 – 50, with higher scores representing higher levels of positive affect. Mean Scores: Momentary _ 29.7 (*SD* _ 7.9); Weekly _ 33.3 (*SD* _ 7.2)

Negative Affect Score: Add the scores on items 2, 4, 6, 7, 8, 11, 13, 15, 18, and 20. Scores can range from 10 – 50, with lower scores representing lower levels of negative affect. Mean Score: Momentary _ 14.8 (*SD* _ 5.4); Weekly _ 17.4 (*SD* _ 6.2)

Copyright © 1988 by the American Psychological Association. Reproduced with permission. The official citation that should be used in referencing this material is Watson, D., Clark, L. A., & Tellegan, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. Journal of Personality and Social Psychology, 54(6), 1063–1070.

Ryff's Scales of Psychological Well-Being

Study ID:

Please read the statements below and decide the extent to which each statement describes you.

Circle the number that best describes your agreement or disagreement with each statement.

Strongly 1	Agree Moderately 2	Slightly 3	Slightly 4	Disagree Moderately 5	Strongly 6
---------------	--------------------------	---------------	---------------	-----------------------------	---------------

Autonomy Items

My decisions are not usually influenced by what everyone else is doing.

I have confidence in my opinions even if they are contrary to the general consensus.

I have confidence in my own opinions, even if they are different from the way most other people think

I tend to worry about what other people think of me.

I often change my mind about decisions if my friends or family disagree.

I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people.

Being happy with myself is more important to me than having others approve of me.

It's difficult for me to voice my opinions on controversial matters.

I tend to be influenced by people with strong opinions.

I judge myself by what I think is important, not by what others think is important.

I judge myself by what I think is important, not by the values of what others think is important.

Environmental Mastery

I am good at juggling my time so that I can fit everything in that needs to get done.

I often feel overwhelmed by my responsibilities.

I am quite good at managing the many responsibilities of my daily life.

I am good at managing the responsibilities of daily life.

I do not fit very well with the people and community around me.

I have difficulty arranging my life in a way that is satisfying to me.

I have been able to create a lifestyle for myself that is much to my liking.

I generally do a good job of taking care of my personal finances and affairs.

In general, I feel I am in charge of the situation in which I live.

The demands of everyday life often get me down.

Personal Growth

I am not interested in activities that will expand my horizons.

I have the sense that I have developed a lot as a person over time.

When I think about it, I haven't really improved much as a person over the years.

I think it is important to have new experiences that challenge how I think about myself and the world

I think it is important to have new experiences that challenge how you think about yourself and the world

I don't want to try new ways of doing things -- my life is fine the way it is.

I do not enjoy being in new situations that require me to change my old familiar ways of doing things.

There is truth to the saying you can't teach an old dog new tricks.

For me, life has been a continuous process of learning, changing, and growing.

For me, life has been a continuous process of learning, changing, and growth.

I gave up trying to make big improvements or changes in my life a long time ago.

Positive Relations

I don't have many people who want to listen when I need to talk.

I enjoy personal and mutual conversations with family members and friends.

I often feel lonely because I have few close friends with whom to share my concerns.

It seems to me that most other people have more friends than I do.

People would describe me as a giving person, willing to share my time with others.

Most people see me as loving and affectionate.

I know I can trust my friends, and they know they can trust me.

Maintaining close relationships has been difficult and frustrating for me.

I have not experienced many warm and trusting relationships with others.

Purpose in Life

I enjoy making plans for the future and working to make them a reality.

My daily activities often seem trivial and unimportant to me.

I am an active person in carrying out the plans I set for myself.

I tend to focus on the present, because the future nearly always brings me problems.

I don't have a good sense of what it is I'm trying to accomplish in life.

I sometimes feel as if I have done all there is to do in life.

I sometimes feel as if I've done all there is to do in life.

I used to set goals for myself, but that now seems like a waste of time.

Some people wander aimlessly through life but I am not one of them.

I live life one day at a time and don't really think about the future.

Self-Acceptance

I feel like many of the people I know have gotten more out of life than I have.

In general, I feel confident and positive about myself.

When I compare myself to friends and acquaintances, it makes me feel good about who I am.

My attitude about myself is probably not as positive as most people feel about themselves.

I made some mistakes in the past, but I feel that all in all everything has worked out for the best

The past had its ups and downs, but in general, I wouldn't want to change it.

In many ways, I feel disappointed about my achievements in life.

When I look at the story of my life, I am pleased *with* how things have turned out.

When I look at the story of my life, I am pleased *about* how things have turned out.

When I look at the story of my life, I am pleased *with* how things have turned out *so far*.

I like most *parts* of my personality.

I like most *aspects* of my personality.

Beck Depression Inventory

1.
0 I do not feel sad.
1 I feel sad
2 I am sad all the time and I can't snap out of it.
3 I am so sad and unhappy that I can't stand it.
2.
0 I am not particularly discouraged about the future.
1 I feel discouraged about the future.
2 I feel I have nothing to look forward to.
3 I feel the future is hopeless and that things cannot improve.
3.
0 I do not feel like a failure.
1 I feel I have failed more than the average person.
2 As I look back on my life, all I can see is a lot of failures.
3 I feel I am a complete failure as a person.
4.
0 I get as much satisfaction out of things as I used to.
1 I don't enjoy things the way I used to.
2 I don't get real satisfaction out of anything anymore.
3 I am dissatisfied or bored with everything.
5.
0 I don't feel particularly guilty
1 I feel guilty a good part of the time.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.
6.
0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.
7.
0 I don't feel disappointed in myself.
1 I am disappointed in myself.
2 I am disgusted with myself.
3 I hate myself.
8.
0 I don't feel I am any worse than anybody else.
1 I am critical of myself for my weaknesses or mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.
9.
0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.
10.
0 I don't cry any more than usual.
1 I cry more now than I used to.
2 I cry all the time now.
3 I used to be able to cry, but now I can't cry even though I want to.
11.
0 I am no more irritated by things than I ever was.
1 I am slightly more irritated now than usual.
2 I am quite annoyed or irritated a good deal of the time.
3 I feel irritated all the time.
12.
0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people.
3 I have lost all of my interest in other people.
13.
0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions more than I used to.
3 I can't make decisions at all anymore.
14.
0 I don't feel that I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel there are permanent changes in my appearance that make me look unattractive.
3 I believe that I look ugly.
15.
0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.
16.
0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.
17.
0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.
18.
0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetite is much worse now.
3 I have no appetite at all anymore.
19.
0 I haven't lost much weight, if any, lately.
1 I have lost more than five pounds.
2 I have lost more than ten pounds.
3 I have lost more than fifteen pounds.
20.
0 I am no more worried about my health than usual.
1 I am worried about physical problems like aches, pains, upset stomach, or constipation.
2 I am very worried about physical problems and it's hard to think of much else.
3 I am so worried about my physical problems that I cannot think of anything else.
21.
0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I have almost no interest in sex.
3 I have lost interest in sex completely.

APPENDIX C

SONGS FOR LYRIC ANALYSIS

Lyric Analysis 1

Shake it Out by Florence + the Machine

Regrets collect like old friends,
Here to relive your darkest moments
I can see no way, I can see no way
And all of the ghouls come out to
play
And every demon wants his pound of
flesh,
But I like to keep some things to
myself
I like to keep my issues strong
It's always darkest before the dawn

And I've been a fool and I've been
blind
I can never leave the past behind
I can see no way, I can see no way
I'm always dragging that horse
around
And our love is passed, it's such a
mournful sound
Tonight I'm gonna bury that horse in
the ground
So I like to keep my issues strong
But it's always darkest before the
dawn

Chorus:

**Shake it out, shake it out, shake it
out, shake it out, ooh woah
Shake it out, shake it out, shake it
out, shake it out, ooh woah
And it's hard to dance with a devil
on your back
So shake him off, ooh woah**

I am done with my graceless heart
So tonight I'm gonna cut it out and
then restart
Cause I like to keep my issues
strong
It's always darkest before the dawn

Chorus

And it's hard to dance with a devil on
your back
And given half the chance would I take
any of it back
It's a final mess but it's left me so undone
It's always darkest before the dawn

Ooh, woah
Ooh, woah

And I'm damned if I do and I'm damned if
I don't
So here's to drinks in the dark at the end
of my road
And I'm ready to suffer and I'm ready to hope
It's a shot in the dark and right at my throat
Cause looking for heaven, for the devil in me
Looking for heaven, for the devil in me
Well, why the hell am I gonna let it
happen to me, yeah

Chorus 2 times

(Ending oohs over chords)

Lyric Analysis 2

Good Riddance by Greenday

Another turning point a fork stuck in the road
Time grabs you by the wrist and directs you where to go
So make the best of this test and don't ask why
It's not a question but a lesson learned in time
It's something unpredictable but in the end it's right
I hope you had the time of your life

Take the photographs and still frames in your mind
Hang them on a shelf in good health and good time
Tattoos of memories and dead skin on trial
For what it's worth it was worth all the while
It's something unpredictable but in the end it's right
I hope you had the time of your life

It's something unpredictable but in the end it's right
I hope you had the time of your life

It's something unpredictable but in the end it's right
I hope you had the time of your life

Lyric Analysis 3 Ready For Love by India.Arie

I am ready for love
Why are you hiding from me
I'd quickly give my freedom
To be held in your captivity

I am ready for love
All of the joy and the pain
And all the time that it takes
Just to stay in your good grace
Lately I've been thinking
Maybe you're not ready for me
Maybe you think I need to learn maturity
They say watch what you ask for
Cause you might receive
But if you ask me tomorrow
I'll say the same thing

I am ready for love
Would you please lend me your ear?
I promise I won't complain
I just need you to acknowledge I am here

If you give me half a chance
I'll prove this to you
I will be patient, kind, faithful and true
To a man who loves music
A man who loves art
Respects the spirit world
And thinks with his heart

I am ready for love
If you'll take me in your hands
I will learn what you teach
And do the best that I can

I am ready for love
Here with an offering of
My voice
My Eyes
My soul
My mind

Tell me what is enough
To prove I am ready for love

I am ready

Ready for Love Song Re-write Worksheet

I am ready for love
Why are you hiding from me
I'd quickly give my freedom
To be held in your captivity

I am ready _____
Why are you hiding from me
I'd quickly give _____
To be _____

I am ready for love
All of the joy and the pain
And all the time that it takes
Just to stay in your good grace

I am ready for _____
All of the _____
And all the time that it takes
Just to _____

Lately I've been thinking
Maybe you're not ready for me
Maybe you think I need to learn maturity
They say watch what you ask for
Cause you might receive
But if you ask me tomorrow
I'll say the same thing

I am ready for love
Would you please lend me your ear?
I promise I won't complain
I just need you to acknowledge I am here

I am ready _____
Would you please _____
I promise _____
I just need _____

I am ready for love
If you'll take me in your hands
I will learn what you teach
And do the best that I can

I am ready for _____
If you'll _____
I will _____
And do the best that I can

I am ready for love
Here with an offering of
My voice, my eyes
My soul, my mind
Tell me what is enough
To prove I am ready for love
I am ready

I am ready for _____
Here with an offering of
My _____, my _____
My _____, my _____
Tell me what is enough
To prove I am ready _____
I am ready

